

## INTERSECTION 89

### Hawthorne Boulevard (SR-107)/Pacific Coast Highway (SR-1) Improvement(s)

#### Forecast Near-Term Conditions Intersection LOS Summary

	Weekday AM Peak Hour	Weekday Mid-Day Peak Hour	Weekday PM Peak Hour	Weekend Mid-Day Peak Hour
Without Improvement(s)	45.7 – D	45.3 – D	49.0 – D	<b>62.7 – E</b>
With Improvement(s)	43.3 – D	43.5 – D	45.5 – D	53.2 – D

**Note:** Delay shown in seconds per vehicle; Deficient intersection operation shown in ***bold italics***.

#### Recommended Improvements:

- Widen the eastbound Pacific Coast Highway (SR-1) approach from one left-turn lane, two through lanes, and one shared through/right-turn lane to consist of one left-turn lane, three through lanes, and one right-turn lane.
- Widen the westbound Pacific Coast Highway (SR-1) approach from one left-turn lane, two through lanes, and one shared through/right-turn lane to consist of one left-turn lane, three through lanes, and one right-turn lane.
- Implementation of the recommended improvements identified at the Hawthorne Boulevard (SR-107)/Pacific Coast Highway (SR-1) intersection will require City acquisition of approximately 12-feet of right-of-way on the eastbound Pacific Coast Highway (SR-1) approach and departure to provide adequate alignment of eastbound through lanes and City acquisition of approximately 12-feet of right-of-way on the westbound Pacific Coast Highway (SR-1) approach and departure to provide adequate alignment of westbound through lanes.







**CITY OF TORRANCE CITYWIDE TRAFFIC ANALYSIS MITIGATION MEASURES  
PRELIMINARY COST ESTIMATES**

**Location:** Intersection 89: Hawthorne Blvd/Pacific Coast Highway (SR-1)

**Date:** 3/7/2008

**Mitigation:** Widen the eastbound Pacific Coast Highway (SR-1) approach to consist of one left-turn lane, three through lanes, and one right-turn lane. Widen the westbound

**Estimated by:** D. Alvarado

	DESCRIPTION OF WORK	UNIT PRICE	QUANTITY	COST
1	Mobilization	10.00% (\$2,000 Min)		\$101,000
2	Clear & Grub	\$10,000.00 / AC	0.10	\$1,000
3	Remove Striping	\$10.00 / LF	737	\$7,400
4	Remove Curb & Gutter	\$15.00 / LF	902	\$14,000
5	Remove Median Curb	\$30.00 / LF		\$0
6	Remove PCC Sidewalk	\$3.50 / SF	7,392	\$26,000
7	Remove Pavement	\$4.00 / SF		\$0
8	Remove Wall	\$50.00 / LF		\$0
9	Remove Channel	\$15.00 / LF		\$0
10	Remove/Replace Chain Link Fence	\$50.00 / LF		\$0
11	Remove/Replace Wrought Iron Fence	\$10.00 / LF		\$0
12	Remove/Replace Survey Monument	\$800.00 / EA		\$0
13	Reconstruct Metal Beam Guard Rail	\$70.00 / LF		\$0
14	Remove & Relocate Tree	\$3,000.00 / EA	5	\$15,000
15	Sawcut	\$1.00 / LF	923	\$900
16	Relocate Street Light	\$7,500.00 / EA	4	\$30,000
17	Relocate Traffic Signal System	\$300,000.00 / EA	0.5	\$150,000
18	Signal Phase Modification	\$10,000.00 / EA		\$0
19	Relocate Freeway Sign (2 post)	\$1,000.00 / EA	2	\$2,000
20	Relocate Sign (1 Post)	\$300.00 / EA	2	\$600
21	Reconstruct Overhead Sign	\$50,000.00 / EA		\$0
22	Relocate Call Box	\$2,000.00 / EA		\$0
23	Relocate Power Pole	\$25,000.00 / EA	3	\$75,000
24	Relocate Catch Basin	\$9,000.00 / EA	2	\$18,000
25	Relocate Fire Hydrant	\$2,500.00 / EA	3	\$7,500
26	Relocate Bus Shelter	\$2,000.00 / EA	1	\$2,000
27	Relocate Bus Bench	\$600.00 / EA		\$0
28	Relocate Monument Sign	\$5,000.00 / EA		\$0
29	Relocate Utility Boxes	\$500.00 / EA		\$0
30	Relocate Main Water Valve	\$10,000.00 / EA		\$0
31	Relocate Utility Vault	\$3,000.00 / EA	17	\$51,000
32	Adjust Manhole to Grade	\$1,000.00 / EA	2	\$2,000
33	Adjust Water Meter	\$2,000.00 / EA	1	\$2,000
34	Adjust Water Valve	\$500.00 / EA	2	\$1,000
35	Adjust Minor Above Ground Utilities	\$500.00 / EA	3	\$2,000
36	Modify Driveway	\$5,000.00 / EA	2	\$8,000
37	Earthwork	\$40.00 / CY	1,726	\$69,000
38	Construct PCC Pavement	\$15.00 / SF	9,316	\$140,000
39	Construct AC Pavement	\$14.00 / SF		\$0
40	Construct AC Overlay	\$3.00 / SF		\$0
41	Construct Slurry Seal	\$0.25 / SF		\$0
42	Construct Striping & Marking	\$4.00 / LF	737	\$3,000
43	Construct AC Dike	\$7.00 / LF		\$0
44	Construct Curb & Gutter	\$40.00 / LF	881	\$35,000
45	Construct Concrete Barrier	\$50.00 / LF		\$0
46	Construct Median Curb	\$20.00 / LF		\$0
47	Construct Median Concrete	\$10.00 / SF		\$0
48	Construct Median/Parkway Landscaping	\$10.00 / SF		\$0
49	Construct PCC Sidewalk	\$10.00 / SF	4,818	\$48,000
50	Construct Access Ramp	\$5,000.00 / EA	2	\$10,000
51	Construct Retaining Wall	\$50.00 / SF		\$0
52	Construct Storm Drain Main	\$100.00 / LF		\$0
53	Construct RCB	\$1,000.00 / LF		\$0
54	Construct Headwall	\$5,000.00 / EA		\$0
55	Construct Concrete V-Ditch	\$15.00 / LF		\$0
56	Construct Bridge Widening	\$500.00 / SF		\$0
57	Construct Wall	\$70.00 / LF		\$0
58	Building/Structure Demolition (1-Story Bldg)	\$10.00 / SF		\$0
59	Traffic Control (\$5,000 min)	8%	1	\$58,000
60	Drainage Items	10%	1	\$78,000
61	SWPPP Plan and Implementation	6%	1	\$50,880
	<b>CONSTRUCTION SUBTOTAL</b>			<b>\$1,008,280</b>
	Right-of-Way	100 / SF	2,500	\$250,000
	Right-of-Way Management	5 / %		\$13,000
	<b>RIGHT-OF-WAY SUBTOTAL</b>			<b>\$263,000</b>
	<b>TOTAL CONSTRUCTION &amp; RIGHT-OF-WAY COST</b>			<b>\$1,272,000</b>
	Preliminary Project Development (10% of total Construction/RW cost)			\$128,000
	Design Engineering/Administration Costs (15% of total Construction/RW cost) (\$10,000 min)			\$191,000
	Construction Engineering Costs/Administration (10% of total Construction/RW cost) (\$5,000 min)			\$128,000
	Contingency (20% of Total Construction/RW cost) (\$5,000 min)			\$255,000
	<b>TOTAL PROJECT COSTS</b>			<b>\$1,974,000</b>